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Nata

LumCAT: LN01D04515DA-N

Luminaire: 97.70.234.00

Report No: 210106-B002

Test No: 210106-C002

LampCAT: TRIDONIC SLE G7 9MM

Lamp flux(lm): 1977.5

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 36.0300

Current(A): 0.3810

Power (W): 13.7270

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1735.54

Efficiency(%): 87.76%

Lumens(lm)/Power(W): 126.43

Central intensity(cd): 10374.190

Maximum intensity(cd): 10374.190

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=19.7

[C90/270]Total=19.7

Field angle(10%Imax): [C0/180]Total=38.1

[C90/270]Total=38.1

Maximum s/h(1/2): C0_180=0.34 C90_270=0.34

Maximum s/h(1/4): C0_180=0.34 C90_270=0.34

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.76%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.360%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	10374.188	0.000	0	.000%	.000%
1.0	10290.938	9.888	9.888	.500%	.570%
2.0	10070.859	29.225	39.113	1.478%	2.254%
3.0	9682.734	47.244	86.357	2.389%	4.976%
4.0	9201.094	63.210	149.567	3.196%	8.618%
5.0	8662.922	76.850	226.417	3.886%	13.046%
6.0	7957.828	87.346	313.764	4.417%	18.079%
7.0	7251.328	94.403	408.167	4.774%	23.518%
8.0	6578.719	98.979	507.146	5.005%	29.221%
9.0	5806.406	100.375	607.521	5.076%	35.005%
10.0	5067.070	98.401	705.922	4.976%	40.675%
11.0	4423.289	94.828	800.75	4.795%	46.138%
12.0	3774.023	89.608	890.358	4.531%	51.302%
13.0	3151.898	82.193	972.551	4.156%	56.037%
14.0	2662.523	74.424	1046.975	3.764%	60.326%
15.0	2216.250	66.978	1113.953	3.387%	64.185%
16.0	1814.913	59.068	1173.021	2.987%	67.588%
17.0	1492.959	51.512	1224.534	2.605%	70.556%
18.0	1245.298	45.148	1269.682	2.283%	73.158%
19.0	1043.838	39.826	1309.508	2.014%	75.453%
20.0	857.053	34.792	1344.3	1.759%	77.457%
21.0	709.770	30.086	1374.386	1.521%	79.191%
22.0	602.888	26.378	1400.764	1.334%	80.711%
23.0	506.243	23.273	1424.037	1.177%	82.052%
24.0	426.466	20.392	1444.429	1.031%	83.227%
25.0	367.010	18.042	1462.471	.912%	84.266%
26.0	317.672	16.162	1478.633	.817%	85.197%
27.0	278.142	14.577	1493.21	.737%	86.037%
28.0	242.002	13.169	1506.379	.666%	86.796%
29.0	208.118	11.776	1518.155	.596%	87.475%
30.0	184.873	10.611	1528.766	.537%	88.086%
31.0	164.827	9.732	1538.497	.492%	88.647%
32.0	147.607	8.951	1547.448	.453%	89.162%
33.0	133.875	8.293	1555.741	.419%	89.640%
34.0	122.421	7.756	1563.497	.392%	90.087%
35.0	111.635	7.269	1570.766	.368%	90.506%
36.0	102.811	6.828	1577.594	.345%	90.899%
37.0	95.421	6.465	1584.059	.327%	91.272%

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	88.411	6.136	1590.195	.310%	91.625%
39.0	81.731	5.807	1596.003	.294%	91.960%
40.0	76.373	5.514	1601.517	.279%	92.278%
41.0	71.262	5.257	1606.774	.266%	92.581%
42.0	66.298	4.998	1611.772	.253%	92.869%
43.0	61.952	4.751	1616.522	.240%	93.142%
44.0	57.895	4.523	1621.046	.229%	93.403%
45.0	54.141	4.306	1625.352	.218%	93.651%
46.0	50.604	4.096	1629.448	.207%	93.887%
47.0	47.334	3.895	1633.343	.197%	94.112%
48.0	44.522	3.713	1637.056	.188%	94.326%
49.0	41.963	3.552	1640.608	.180%	94.530%
50.0	39.502	3.397	1644.004	.172%	94.726%
51.0	37.617	3.263	1647.267	.165%	94.914%
52.0	35.880	3.154	1650.421	.159%	95.096%
53.0	34.172	3.047	1653.468	.154%	95.271%
54.0	32.716	2.948	1656.417	.149%	95.441%
55.0	31.395	2.862	1659.278	.145%	95.606%
56.0	30.030	2.776	1662.054	.140%	95.766%
57.0	28.821	2.691	1664.745	.136%	95.921%
58.0	27.717	2.615	1667.359	.132%	96.072%
59.0	26.641	2.541	1669.901	.129%	96.218%
60.0	25.636	2.470	1672.37	.125%	96.360%
61.0	24.652	2.400	1674.77	.121%	96.499%
62.0	23.738	2.332	1677.102	.118%	96.633%
63.0	22.929	2.270	1679.372	.115%	96.764%
64.0	22.036	2.206	1681.578	.112%	96.891%
65.0	21.389	2.149	1683.727	.109%	97.015%
66.0	21.150	2.122	1685.849	.107%	97.137%
67.0	21.185	2.129	1687.978	.108%	97.260%
68.0	21.480	2.161	1690.139	.109%	97.384%
69.0	22.113	2.224	1692.363	.112%	97.512%
70.0	22.894	2.311	1694.675	.117%	97.645%
71.0	23.787	2.413	1697.088	.122%	97.785%
72.0	24.870	2.530	1699.618	.128%	97.930%
73.0	25.784	2.649	1702.266	.134%	98.083%
74.0	26.641	2.756	1705.022	.139%	98.242%
75.0	27.352	2.853	1707.875	.144%	98.406%

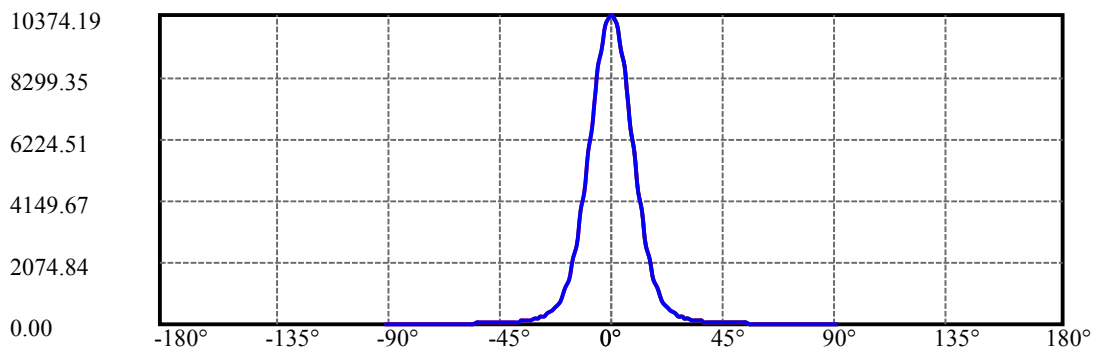
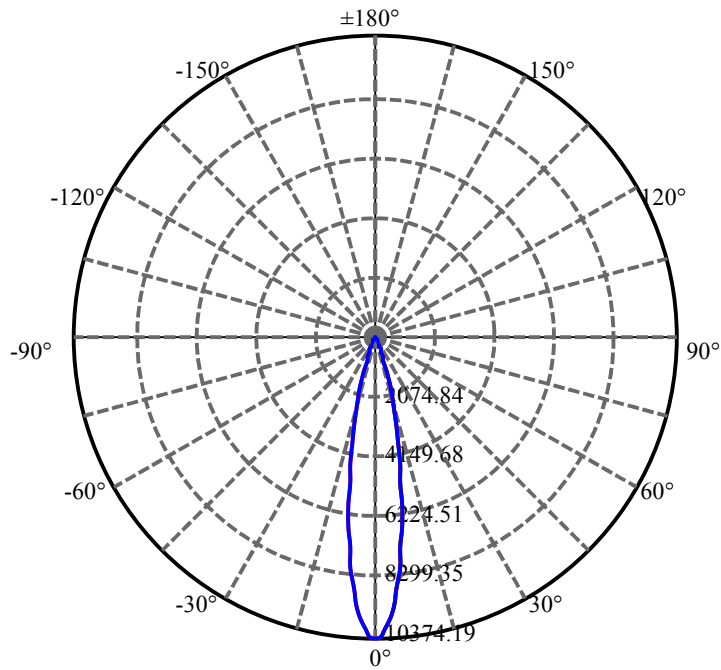
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	27.570	2.915	1710.791	.147%	98.574%
77.0	27.211	2.921	1713.711	.148%	98.742%
78.0	26.311	2.865	1716.576	.145%	98.907%
79.0	24.666	2.739	1719.315	.139%	99.065%
80.0	22.416	2.538	1721.854	.128%	99.212%
81.0	20.060	2.297	1724.151	.116%	99.344%
82.0	17.409	2.032	1726.183	.103%	99.461%
83.0	14.745	1.748	1727.93	.088%	99.562%
84.0	12.621	1.491	1729.421	.075%	99.648%
85.0	10.779	1.277	1730.698	.065%	99.721%
86.0	9.548	1.111	1731.81	.056%	99.785%
87.0	8.831	1.006	1732.815	.051%	99.843%
88.0	8.381	0.943	1733.758	.048%	99.897%
89.0	8.093	0.903	1734.661	.046%	99.949%
90.0	7.903	0.877	1735.538	.044%	100.000%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1528.77	77.31%	88.09%
0-40	1601.52	80.99%	92.28%
0-60	1672.37	84.57%	96.36%
0-90	1734.66	87.72%	99.95%
0-120	1734.66	87.72%	99.95%
0-180	1735.54	87.76%	100.00%
60-90	64.76	3.27%	3.73%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-21.53	1388.43	70.21%	80.00%

ZONAL LUMEN SUMMARY

0-10	705.92
10-20	638.38
20-30	184.47
30-40	72.75
40-50	42.49
50-60	28.37
60-70	22.30
70-80	27.18
80-90	12.81
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



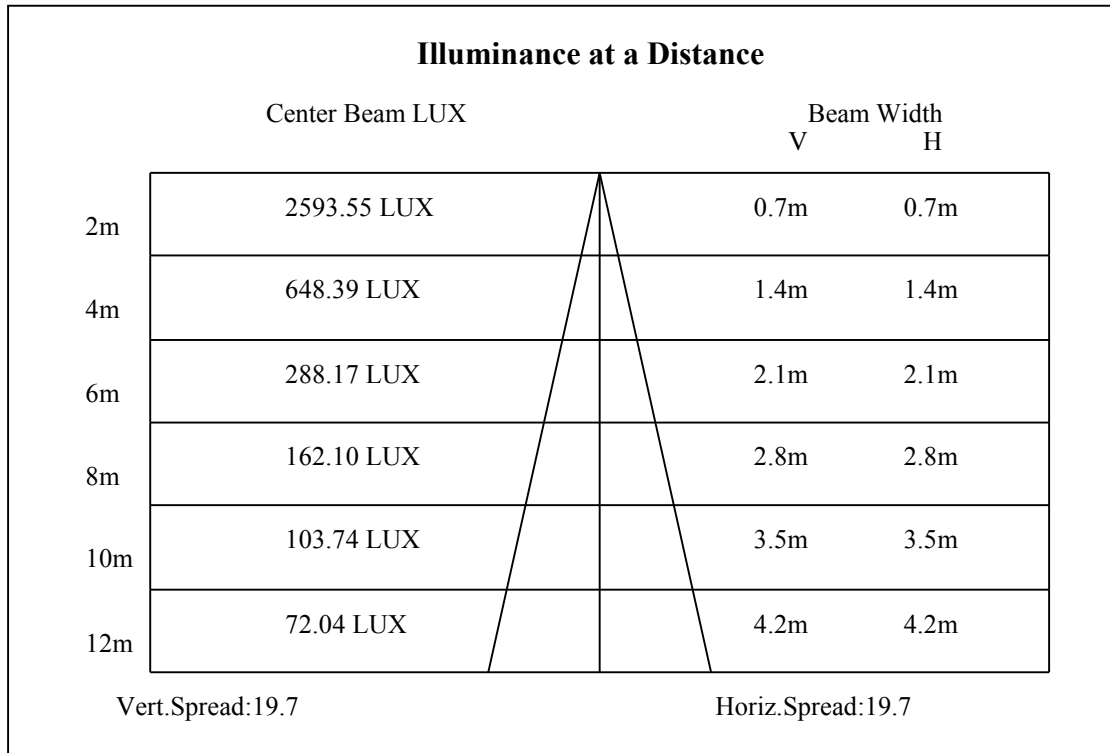
C0(Max): —————

C0/C180: —————

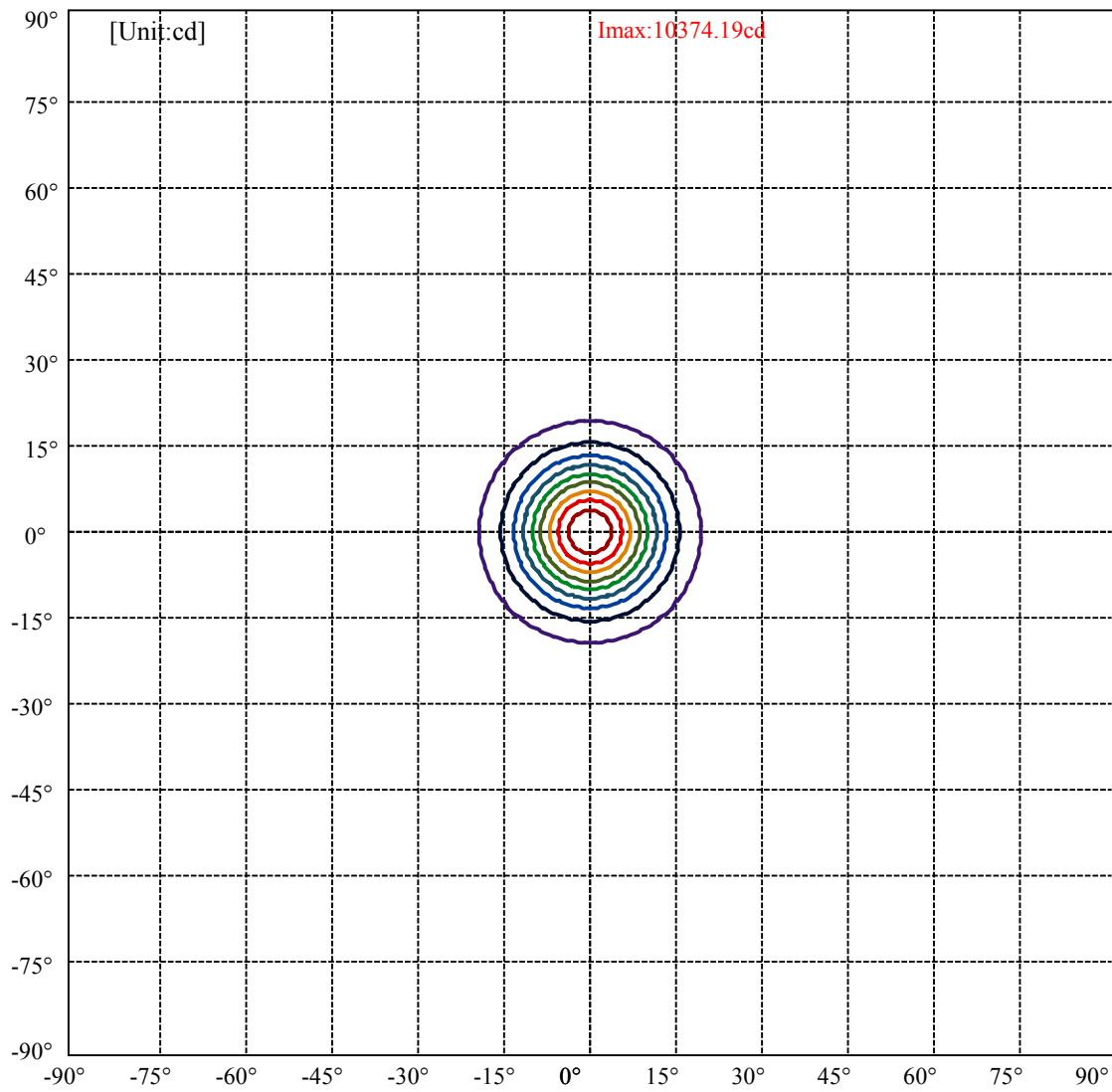
C90/C270: —————

Field angle(10%Imax):C0/180Left:19.0 Right:19.0
:C90/270Left:19.0 Right:19.0

Beam Angle(50%Imax):C0/180Left:9.8 Right:9.8
:C90/270Left:9.8 Right:9.8



ISO-Intensity(V-H)

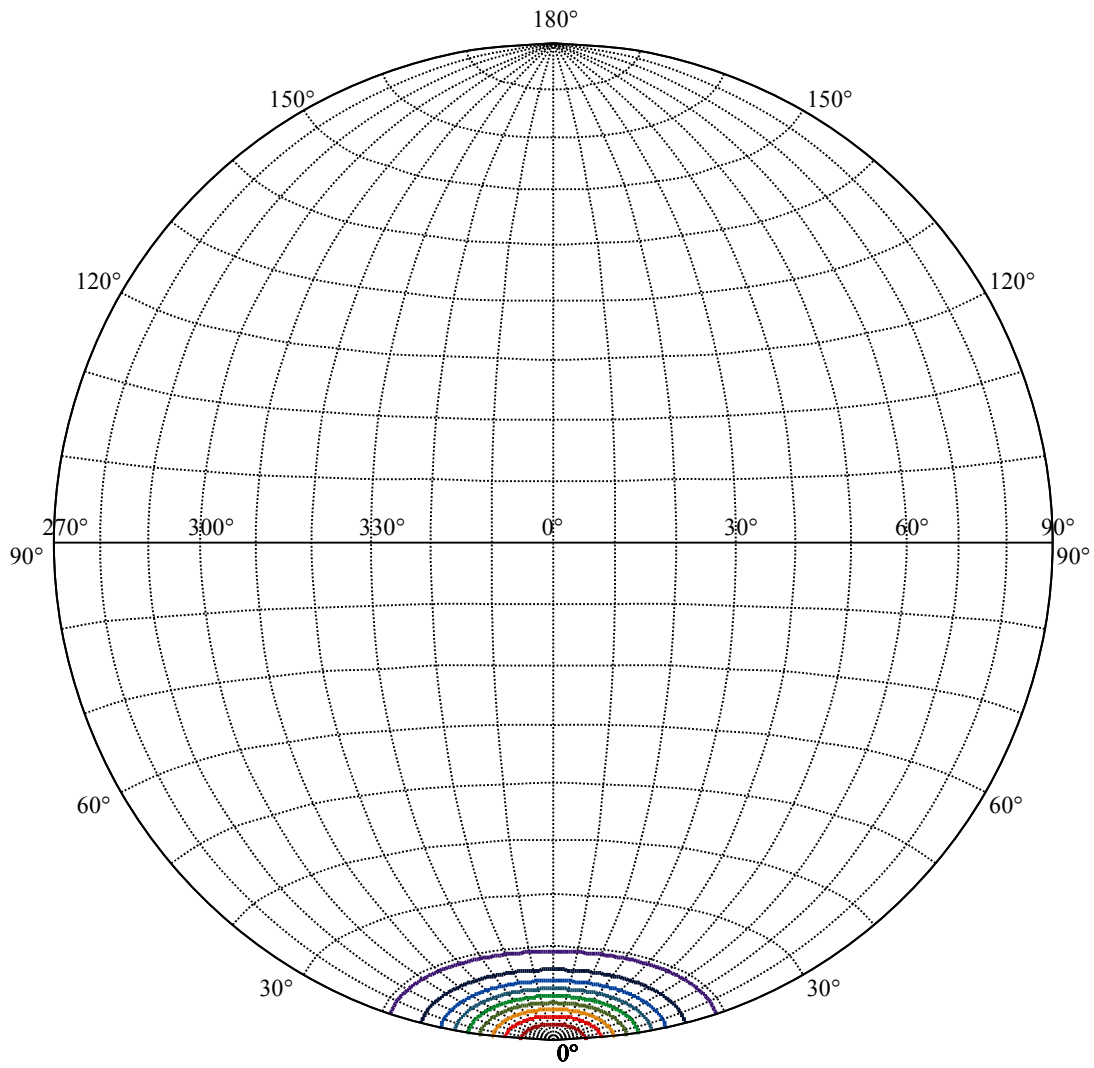


(10%Imax) 1037.42	—
(20%Imax) 2074.84	—
(30%Imax) 3112.26	—
(40%Imax) 4149.67	—
(50%Imax) 5187.09	—
(60%Imax) 6224.51	—
(70%Imax) 7261.93	—
(80%Imax) 8299.35	—
(90%Imax) 9336.77	—

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/01/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50



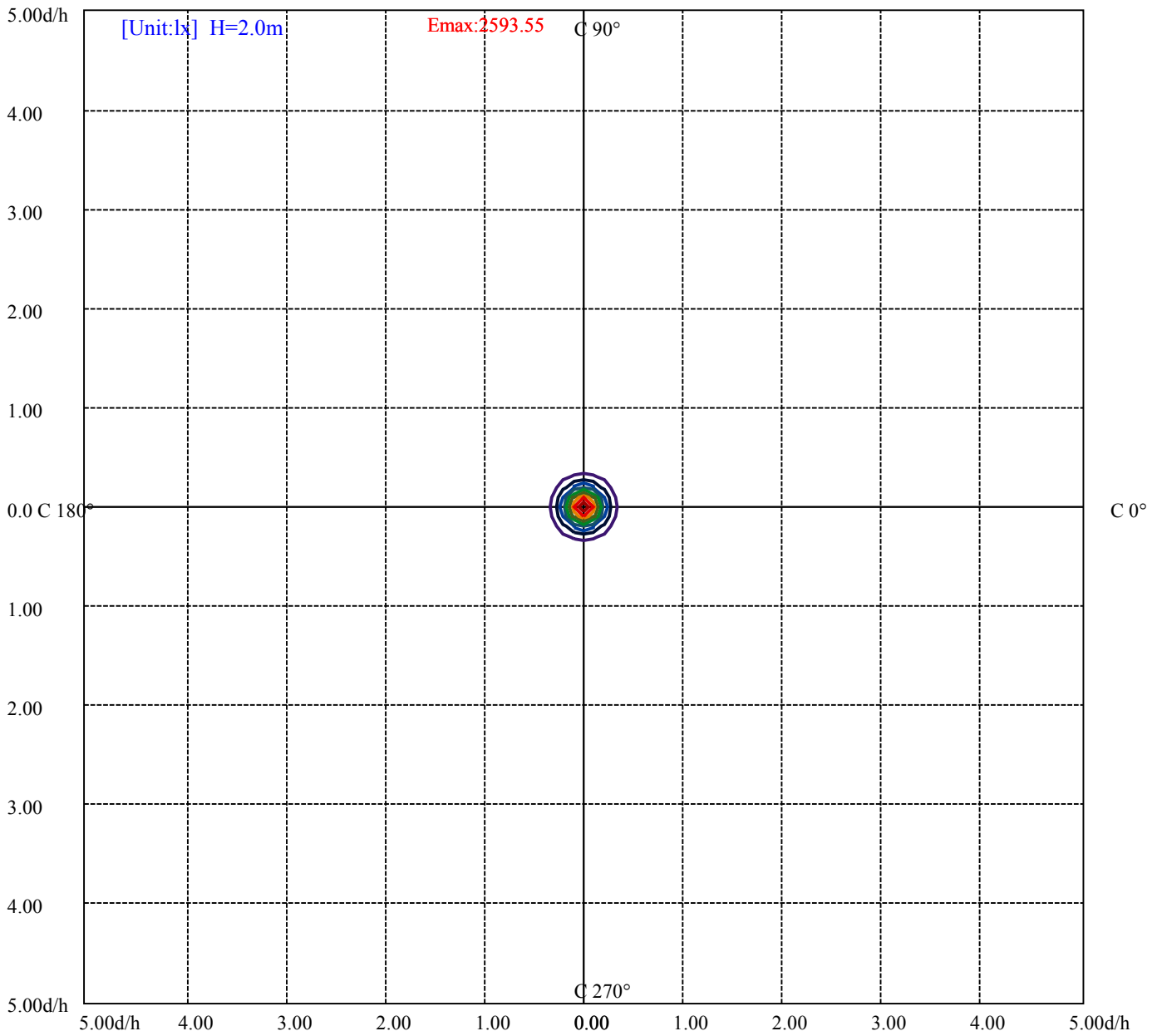
House

[Unit:cd]

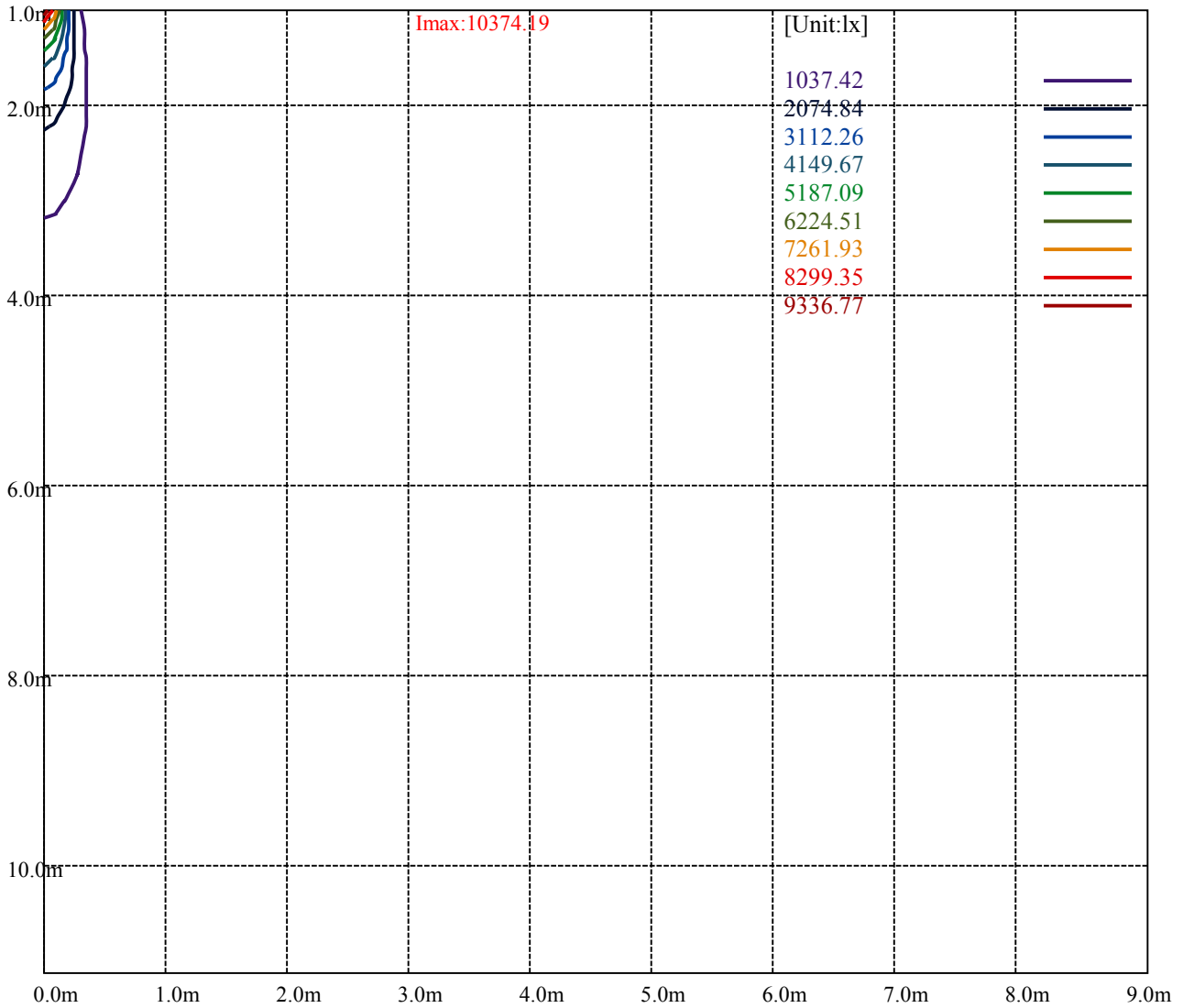
Road

Imax:10374.19

(10%Imax) 1037.42	—
(20%Imax) 2074.84	—
(30%Imax) 3112.26	—
(40%Imax) 4149.67	—
(50%Imax) 5187.09	—
(60%Imax) 6224.51	—
(70%Imax) 7261.93	—
(80%Imax) 8299.35	—
(90%Imax) 9336.77	—



(10%Emax) 259.355	—
(20%Emax) 518.7075	—
(30%Emax) 778.0625	—
(40%Emax) 1037.417	—
(50%Emax) 1296.772	—
(60%Emax) 1556.125	—
(70%Emax) 1815.48	—
(80%Emax) 2074.835	—
(90%Emax) 2334.19	—



Luminance Table

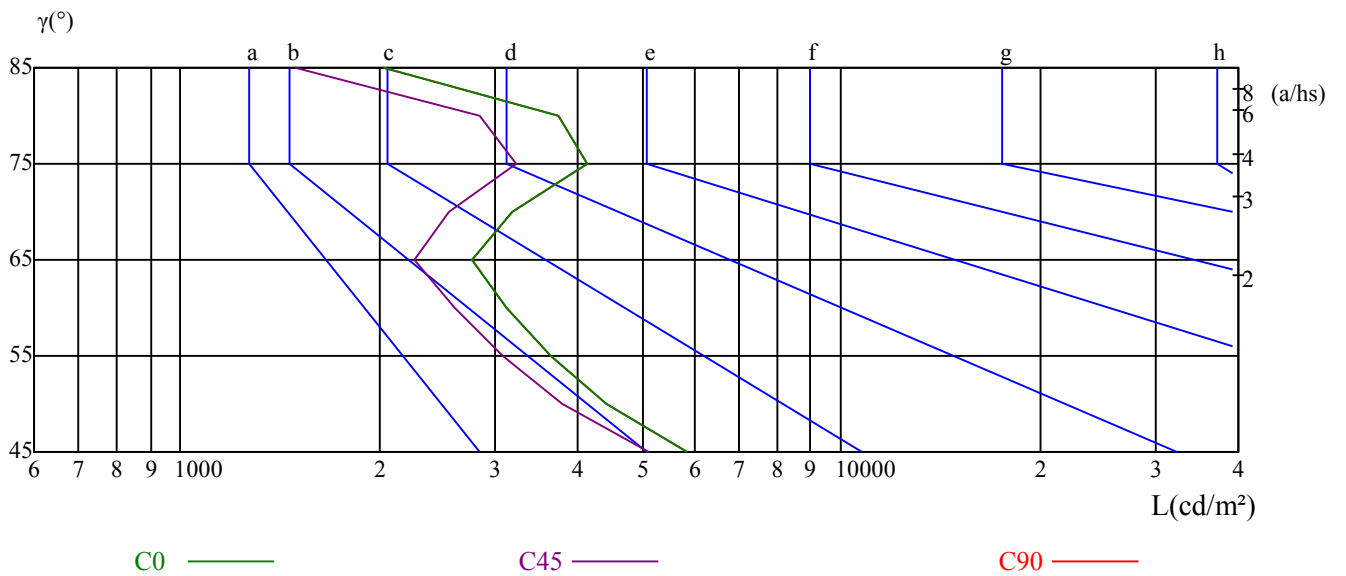
γ	45	50	55	60	65	70	75	80	85
C0	5861	4407	3641	3120	2761	3172	4123	3736	2026
C45	5115	3789	3083	2598	2258	2542	3228	2846	1493
C90	5861	4407	3641	3120	2761	3172	4123	3736	2026

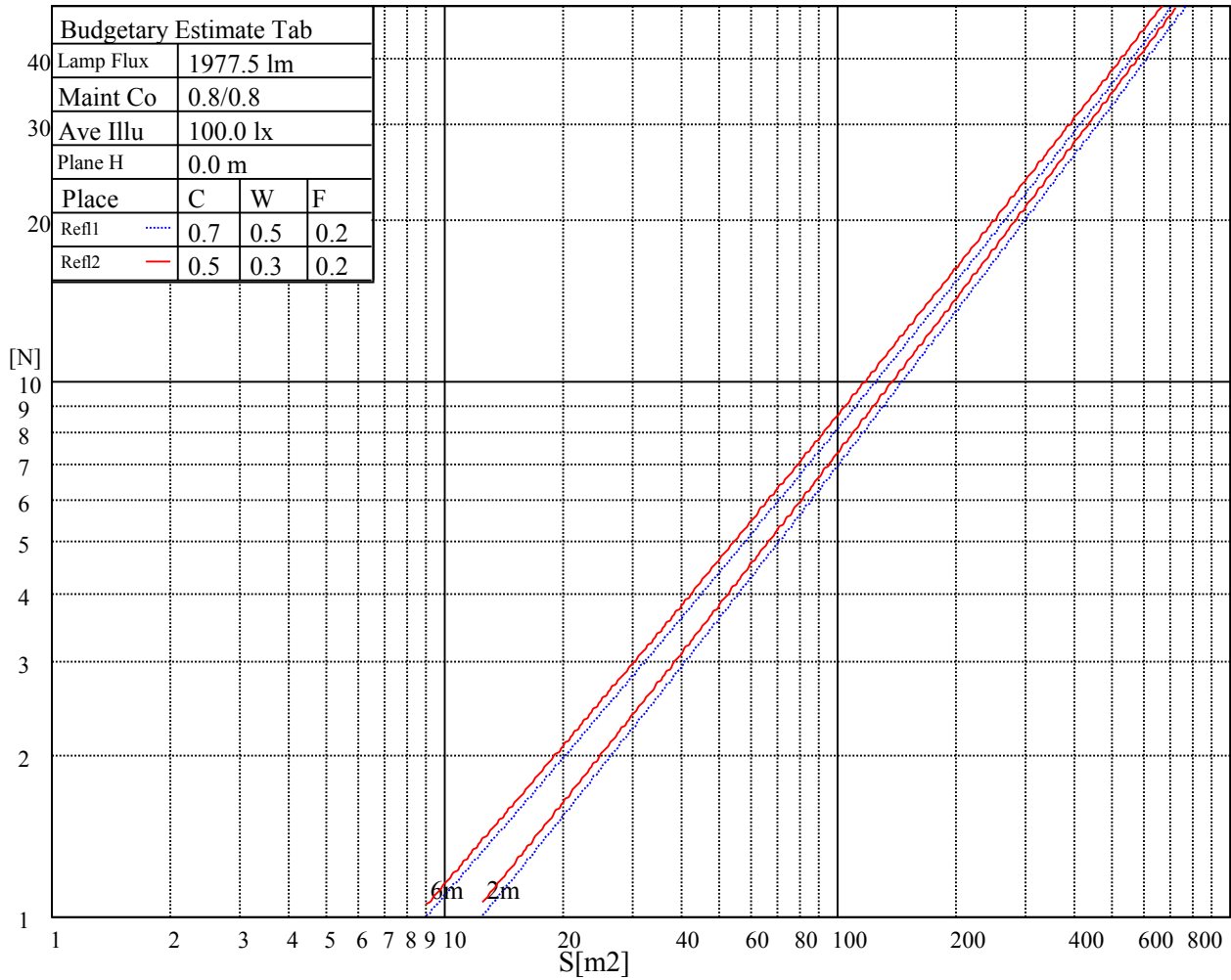
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
5980	5980	5980	12486	12486	12486	14612	14612	14612

Glare Table

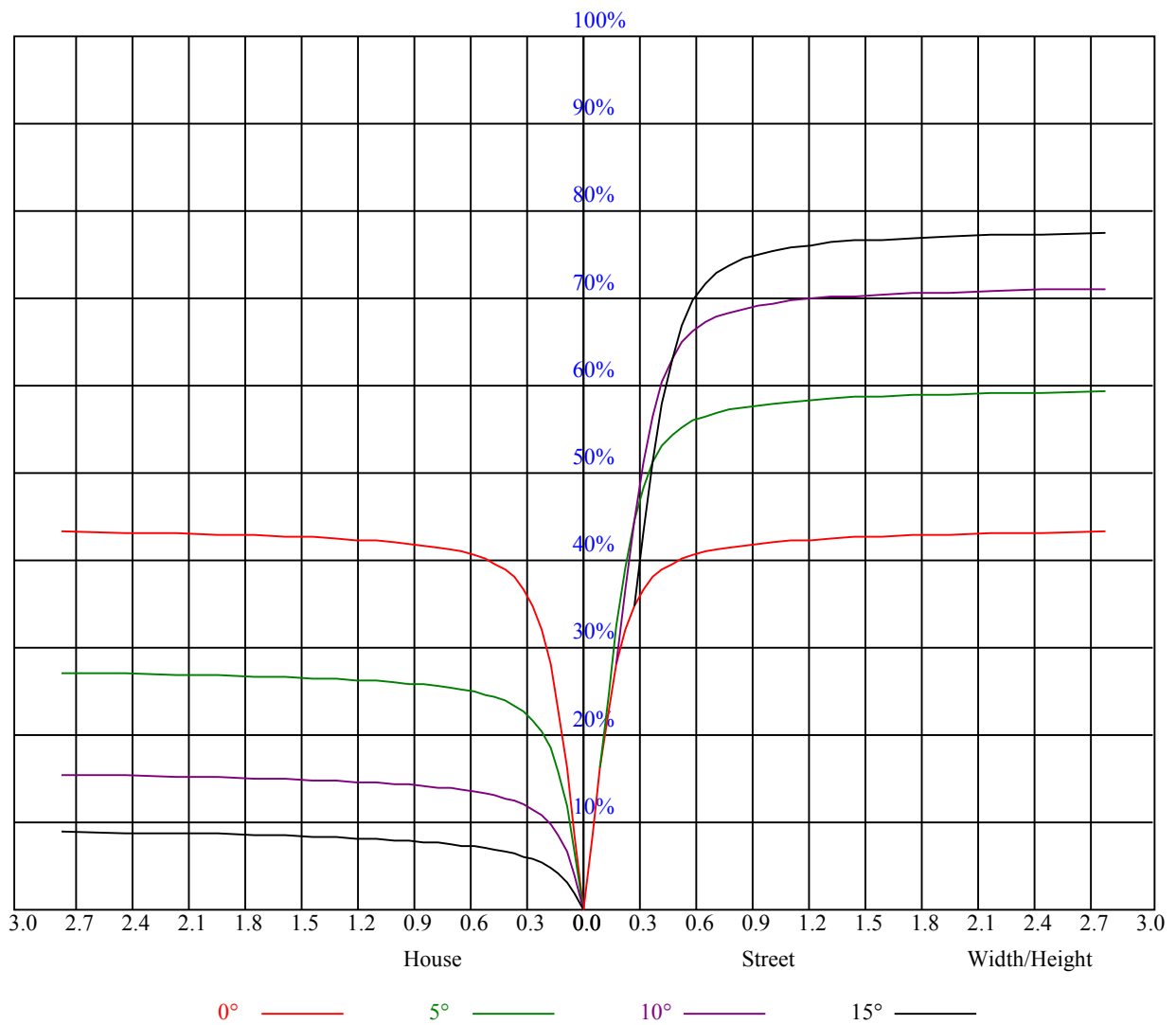
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

Luminance Limiting Curve





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.04	1.04	1.04	1.02	1.02	1.02	0.98	0.98	0.98	0.93	0.93	0.93	0.90	0.90	0.90	0.88
1	0.98	0.96	0.94	0.96	0.95	0.93	0.93	0.91	0.90	0.89	0.88	0.87	0.87	0.86	0.85	0.83
2	0.93	0.90	0.88	0.91	0.89	0.87	0.89	0.87	0.85	0.86	0.84	0.83	0.84	0.82	0.81	0.80
3	0.89	0.85	0.82	0.88	0.84	0.82	0.85	0.83	0.80	0.83	0.81	0.79	0.81	0.80	0.78	0.77
4	0.85	0.81	0.78	0.84	0.81	0.78	0.82	0.79	0.77	0.81	0.78	0.76	0.79	0.77	0.75	0.74
5	0.82	0.78	0.75	0.81	0.78	0.75	0.80	0.77	0.74	0.78	0.76	0.74	0.77	0.75	0.73	0.72
6	0.79	0.75	0.72	0.78	0.75	0.72	0.77	0.74	0.72	0.76	0.73	0.71	0.75	0.73	0.71	0.70
7	0.77	0.73	0.70	0.76	0.72	0.70	0.75	0.72	0.70	0.74	0.71	0.69	0.73	0.71	0.69	0.68
8	0.74	0.71	0.68	0.74	0.70	0.68	0.73	0.70	0.68	0.72	0.69	0.67	0.72	0.69	0.67	0.66
9	0.72	0.69	0.66	0.72	0.68	0.66	0.71	0.68	0.66	0.71	0.68	0.66	0.70	0.67	0.65	0.65
10	0.70	0.67	0.64	0.70	0.67	0.64	0.70	0.66	0.64	0.69	0.66	0.64	0.68	0.66	0.64	0.63



Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	10291.50	10488.94	10537.88	10389.38	10116.00	9671.63	9100.13	8521.31	7890.19
45.0	10443.94	10404.00	10170.56	9795.94	9355.50	8817.19	8051.63	7376.06	6674.06
90.0	10342.13	9986.06	9630.00	9081.00	8346.94	7767.56	7076.25	6105.38	5497.31
135.0	10419.19	10144.13	9694.13	9120.94	8532.56	7960.50	6990.75	6288.19	5679.00
180.0	10291.50	9974.81	9484.88	8889.75	8285.06	7529.63	6831.56	6029.44	5232.94
225.0	10443.94	10308.94	10059.75	9641.25	9095.63	8526.38	7814.81	7065.00	6380.44
270.0	10342.13	10456.31	10435.50	10213.88	9900.56	9473.06	8817.75	8228.25	7597.13
315.0	10419.19	10564.31	10554.19	10329.75	9976.50	9557.44	8979.75	8397.00	7678.69
360.0	10291.50	10488.94	10537.88	10389.38	10116.00	9671.63	9100.13	8521.31	7890.19
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	7049.25	6351.75	5646.94	4876.31	4139.44	3529.69	2910.38	2370.38	1963.13
45.0	5799.38	5112.00	4445.44	3741.75	3111.19	2623.50	2163.94	1820.25	1491.75
90.0	4816.69	3944.81	3439.69	2919.38	2414.81	1996.88	1686.38	1392.19	1100.98
135.0	4750.88	4105.69	3584.25	2914.31	2412.56	2080.13	1687.50	1430.44	1207.69
180.0	4554.00	3840.19	3198.94	2696.63	2260.69	1802.25	1498.50	1102.56	1003.44
225.0	5697.56	4858.88	4207.50	3594.94	2918.81	2454.19	2055.38	1631.81	1263.38
270.0	6775.88	6098.06	5423.06	4683.94	3985.31	3413.25	2836.13	2334.38	1958.63
315.0	7007.63	6225.19	5440.50	4764.94	3972.38	3400.31	2891.81	2437.31	1954.69
360.0	7049.25	6351.75	5646.94	4876.31	4139.44	3529.69	2910.38	2370.38	1963.13
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1585.13	1308.94	1055.81	852.19	705.38	572.63	470.25	397.13	344.25
45.0	1225.69	1031.06	850.50	709.88	618.19	529.31	444.94	387.56	340.31
90.0	972.79	829.86	697.89	589.78	510.08	435.54	380.19	328.16	284.79
135.0	992.25	843.75	724.50	601.88	528.75	453.94	384.75	337.50	297.56
180.0	812.59	678.54	557.94	462.94	394.37	332.66	288.34	248.06	215.33
225.0	1122.13	931.56	757.13	619.99	511.48	433.91	363.60	313.54	268.76
270.0	1608.19	1349.44	1108.13	911.25	767.81	636.19	530.44	452.25	388.13
315.0	1643.63	1377.56	1104.53	930.26	787.05	655.76	549.23	471.88	402.24
360.0	1585.13	1308.94	1055.81	852.19	705.38	572.63	470.25	397.13	344.25
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	289.13	239.74	211.16	185.12	164.42	149.68	135.62	123.75	114.86
45.0	294.19	284.06	221.96	197.55	172.01	154.86	138.88	127.01	115.48
90.0	251.83	223.48	193.67	173.81	156.88	138.66	126.96	116.33	106.03
135.0	288.00	223.14	198.73	175.28	155.81	141.24	127.35	116.78	106.37
180.0	191.31	170.72	149.85	136.35	124.93	113.12	105.36	98.38	91.63
225.0	236.19	205.76	181.80	164.03	148.73	132.53	121.95	112.84	102.49
270.0	324.00	287.44	246.04	215.10	189.79	171.39	153.45	138.43	127.07
315.0	350.49	301.67	261.73	231.75	206.04	179.38	161.44	145.86	129.15
360.0	289.13	239.74	211.16	185.12	164.42	149.68	135.62	123.75	114.86
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	106.43	99.79	93.09	86.68	81.73	77.23	72.00	68.01	64.13
45.0	106.71	98.04	91.35	84.71	78.58	73.58	68.06	64.01	60.08
90.0	96.98	90.00	83.08	76.61	71.33	65.87	61.37	56.76	52.43
135.0	97.48	90.39	84.04	77.06	71.83	66.99	61.43	57.43	53.78
180.0	85.44	80.55	75.54	70.76	66.71	62.44	58.89	55.13	51.58
225.0	95.46	89.21	82.86	77.12	72.45	67.73	63.90	59.63	55.86
270.0	115.82	106.76	97.99	89.89	83.87	78.24	71.94	67.22	62.78
315.0	118.18	108.62	99.34	91.01	84.49	78.02	72.79	67.44	62.55
360.0	106.43	99.79	93.09	86.68	81.73	77.23	72.00	68.01	64.13

Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	59.63	56.25	52.99	49.56	46.35	43.76	41.23	39.26	37.35
45.0	56.70	52.65	49.73	46.97	44.38	42.08	40.28	38.36	36.62
90.0	49.11	46.07	42.53	40.22	38.25	36.17	34.88	33.58	32.29
135.0	49.95	46.58	43.82	41.06	39.32	37.35	35.61	34.20	32.79
180.0	48.71	45.96	43.03	40.84	38.93	36.73	35.33	33.92	32.29
225.0	52.76	49.28	46.13	43.65	41.46	39.04	37.41	35.72	34.09
270.0	57.77	53.83	50.23	46.97	43.20	40.50	38.14	35.78	33.86
315.0	58.50	54.23	50.23	46.91	43.82	40.39	38.08	36.23	34.09
360.0	59.63	56.25	52.99	49.56	46.35	43.76	41.23	39.26	37.35
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	35.61	34.20	32.74	31.33	30.09	28.97	27.62	26.61	25.71
45.0	35.21	33.64	32.40	30.99	29.70	28.58	27.39	26.33	25.31
90.0	30.99	29.76	28.41	27.34	26.27	25.26	24.53	23.63	22.84
135.0	31.44	30.32	29.19	27.96	27.00	26.04	24.98	24.13	23.29
180.0	31.05	29.87	28.46	27.56	26.55	25.48	24.64	23.63	22.67
225.0	32.57	31.28	29.93	28.69	27.62	26.49	25.54	24.53	23.51
270.0	32.23	30.88	29.42	28.18	27.06	26.10	25.03	24.02	23.23
315.0	32.63	31.22	29.70	28.52	27.45	26.21	25.37	24.36	23.34
360.0	35.61	34.20	32.74	31.33	30.09	28.97	27.62	26.61	25.71
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	24.69	23.74	22.95	22.11	21.26	20.53	19.80	19.18	18.51
45.0	24.47	23.18	22.33	21.60	20.59	19.80	19.24	18.45	17.78
90.0	22.11	21.49	21.88	24.19	27.68	31.78	36.56	41.18	45.62
135.0	22.39	21.54	20.87	20.08	19.41	18.73	18.28	18.34	18.90
180.0	21.88	21.15	20.25	19.63	18.96	18.39	17.66	17.10	16.48
225.0	22.67	21.66	20.81	20.08	19.35	18.56	18.00	17.44	16.82
270.0	22.50	21.66	21.04	21.04	22.39	25.03	28.80	33.19	37.69
315.0	22.73	21.88	20.98	20.48	19.86	19.01	18.56	18.28	18.51
360.0	24.69	23.74	22.95	22.11	21.26	20.53	19.80	19.18	18.51
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	17.89	17.33	16.71	16.09	15.53	14.96	14.34	13.89	13.50
45.0	17.16	16.37	15.81	15.24	14.57	14.06	13.67	13.11	12.77
90.0	50.01	53.72	56.93	59.51	59.74	56.53	51.36	45.73	38.19
135.0	20.03	20.76	21.43	21.77	21.94	21.66	20.53	18.00	15.75
180.0	15.86	15.30	14.74	14.18	13.61	13.05	12.66	12.26	11.70
225.0	16.20	15.58	14.96	14.34	13.89	13.39	12.99	12.54	12.09
270.0	42.58	46.91	50.46	54.34	57.21	59.51	60.19	57.60	52.82
315.0	19.24	20.31	22.11	23.34	24.08	24.53	24.75	24.19	22.50
360.0	17.89	17.33	16.71	16.09	15.53	14.96	14.34	13.89	13.50
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	12.94	12.60	12.15	11.76	11.19	10.74	10.07	9.45	8.83
45.0	12.21	11.76	11.19	10.52	10.01	9.45	8.83	8.33	8.04
90.0	31.28	23.12	14.91	11.93	9.51	8.61	8.04	7.76	7.59
135.0	13.39	11.64	11.14	10.29	9.00	8.38	7.99	7.71	7.65
180.0	11.36	10.97	10.35	10.01	9.45	8.72	8.33	8.16	8.10
225.0	11.70	11.19	10.74	10.24	9.79	9.23	8.72	8.21	8.04
270.0	46.97	40.16	32.68	23.79	15.81	10.80	9.28	8.66	8.21
315.0	20.64	17.83	14.79	12.43	11.48	10.46	9.39	8.78	8.27
360.0	12.94	12.60	12.15	11.76	11.19	10.74	10.07	9.45	8.83

Intensity data(cd)

C/γ(°)	90.0
0.0	8.44
45.0	7.93
90.0	7.59
135.0	7.59
180.0	7.99
225.0	7.88
270.0	7.82
315.0	7.99
360.0	8.44